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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,713

09/21/2005

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10/15/2008

EXAMINER

HAYES, KRISTEN C

ART UNIT

PAPER NUMBER

3643

MAIL DATE

DELIVERY MODE

10/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,713

Applicant(s)

HOLMENLUND, NIELS

Examiner

Kristen C. Hayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/08/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 2005/02/15 has been considered by the examiner.

Drawings

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1, 2, 4, 6, 7, 10, 11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckers WO 96/03030.
5. Regarding claims 1, 10 and 13, Deckers discloses a first growth substrate (18) in which a plant (17) is positioned for growth which has a first water uptake capacity and a first sinking time S1, in fluid communication with a second mineral rock wool substrate (11) which has a density of 60kg/m³ (Deckers, page 2: lines 32-33) with the second substrate being flooded with

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water at intervals (Deckers, page 5: lines 18-19). Not disclosed is the composition of the first growth substrate or the first water uptake capacity being more than the second uptake capacity. However, Deckers discloses that peat as a known substrate (Deckers, page 1: lines 9-10). Peat would be an inexpensive and easily found substrate to use with as the first growth substrate of Deckers. Peat, which has a greater water uptake capacity than mineral wool having a density of 60kg/m³, would ensure that the plant received an appropriate amount of water for survival. The second water uptake capacity of the mineral wool having a density of 60kg/m³ which is less than the first water uptake capacity of the peat and a second sinking time S2 with the value of S1 greater than the value of S2 (as per applicant's disclosure). It would be obvious to one of ordinary skill in the art at the time of the invention to make the second substrate of Deckers with peat, as suggested by Deckers and discussed above. Given the structure, the method is inherently performed.

6. Regarding claims 2 and 11, Deckers further discloses the mineral wool having a density of 60kg/m³ (Deckers, page 2: lines 32-33). Given the structure, the method is inherently performed.

7. Regarding claim 4, Deckers further discloses the mineral wool fibers having a substantially horizontal orientation (Deckers, page 4: lines 32-33). Given the structure, the method is inherently performed.

8. Regarding claim 6, Deckers further discloses the plant grown under conditions of drought stress (Deckers, page 5: lines 18-19). Given the structure, the method is inherently performed.

9. Regarding claim 7, Deckers further discloses the first growth substrate comprising peat (Deckers, page 1: lines 9-10). Given the structure, the method is inherently performed.

10. Regarding claims 14 and 15, Deckers discloses a method of growing multiple plants (Deckers, Figure 3) in which each plant is positioned for growth in a first growth substrate (18) which has a first uptake capacity and a first sinking time S1, and the first growth substrate being in fluid communication with a discrete second mineral wool substrate (11) with a density of 60kg/m^3 (Deckers, page 2: lines 32-33) and a second sinking time S2, with the second substrate being flooded with water at intervals (Deckers, page 5: lines 18-19). Not disclosed is the composition of the first growth substrate or the first water uptake capacity being more than the second uptake capacity or at least 10 pots being grown. However, Deckers discloses that peat as a known substrate (Deckers, page 1: lines 9-10). Peat would be an inexpensive and easily found substrate to use with as the first growth substrate of Deckers. Peat, which has a greater water uptake capacity than mineral wool having a density of 60kg/m^3 , would ensure that the plant received an appropriate amount of water for survival. The second water uptake capacity of the mineral wool having a density of 60kg/m^3 which is less than the first water uptake capacity of the peat and a second sinking time S2 with the value of S1 greater than the value of S2 (as per applicant's disclosure). It would be obvious to one of ordinary skill in the art at the time of the invention to make the second substrate of Deckers with peat, as suggested by Deckers and discussed above and to grow any number of desired plants, depended on the users need. Given the structure, the method is inherently performed.

11. Claims 3, 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckers WO 96/03030 in view Blaakmeer et al US 7,104,006.

12. Regarding claims 3 and 12 Deckers discloses the device of claim 1 but does not disclose the thickness of the mineral wool fibers. Blaakmeer teaches the fibers of a mineral wool substrate being 3 microns (Blaakmeer, column 1: lines 25-27). It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable

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ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mineral wool fibers of Deckers so they were 2 microns as taught by Blaakmeer to alter the density of the mineral wool. Given the structure, the method is inherently performed.

13. Regarding claim 5, Deckers discloses the device of claim 1 but does not disclose the mineral wool being bonded with a hydrophilic binder. Blaakmeer teaches a hydrophilic binder (Blaakmeer, column 4: line 43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mineral wool of Deckers with the hydrophilic binder of Blaakmeer to impart the hydrophobic mineral wool matrix with hydrophilic properties, allowing it to uptake water more easily. Given the structure, the method is inherently performed.

14. Claims 8, 9 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckers WO 96/03030 in view of Struyk WO 92/13441.

15. Regarding claim 8, Deckers further discloses multiple plants (Deckers, Figure 3). Not disclosed are at least 10 plants with every plant within a pot. It would be obvious to grow any number of desired plants, depended on the users need. Struyk teaches a plant (6) within a pot (formed by 12) having a base (8)(Struyk, page 4: lines14-15) having apertures (17) with the second substrate layer of mineral wool (Struyk, abstract) contained in the pot and forming a barrier between the first growth substrate and the apertures (Struyk, Figure 1). It would have been obvious to modify the device of Deckers so that every plant was contained in a pot with the substrates of Deckers as to provide separate growing environments for each plant. Given the structure, the method is inherently performed.

16. Regarding claim 9, Deckers further discloses multiple plants (Deckers, Figure 3). Not discloses are at least 10 plants with every plant within a pot or the mineral wool in each pot being of the same size. It would be obvious to grow any number of desired plants, depended on

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the users need. Struyk teaches a plant (6) within a pot (formed by 12). Plants grown in pots are well known in the art. The mineral wool being the same size would provide consistent results from pot to pot and ensure the same volume of water was taken up in each pot. It would have been obvious to modify the device of Deckers so that every plant was contained in a pot with the substrates of Deckers as to provide separate growing environments for each plant, and to make the mineral wool the same size to provide consistent results from pot to pot. Given the structure, the method is inherently performed.

17. Regarding claim 16, Deckers discloses the device of claim 14 but does not disclose each plant being in a pot. Struyk teaches a plant (6) within a pot (formed by 12) having a base (8)(Struyk, page 4: lines14-15) having apertures (17) with the second substrate layer of mineral wool (Struyk, abstract) contained in the pot and forming a barrier between the first growth substrate and the apertures (Struyk, Figure 1). It would have been obvious to modify the device of Deckers so that every plant was contained in a pot with the substrates of Deckers as to provide separate growing environments for each plant. Given the structure, the method is inherently performed.

18. Regarding claim 17, Deckers discloses the device of claim 14 but does not disclose the mineral wool in each pot being of the same size. Struyk teaches a plant (6) within a pot (formed by 12). Plants grown in pots are well known in the art. The mineral wool being the same size would provide consistent results from pot to pot and ensure the same volume of water was taken up in each pot. It would have been obvious to modify the device of Deckers so that every plant was contained in a pot with the substrates of Deckers as to provide separate growing environments for each plant, and to make the mineral wool the same size to provide consistent results from pot to pot. Given the structure, the method is inherently performed.

Response to Arguments

19. Applicant's arguments with respect to claims 1 and 10 have been considered but are moot in view of the new ground(s) of rejection.
20. The ebb and flow system of Deckers is still considered as providing drought stress conditions to the system.
21. Struyk discloses a plant grown in a substrate which is then placed on a substrate of mineral wool, as does the embodiment of Figure 3 of Deckers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen C. Hayes whose telephone number is 571-270-3093. The examiner can normally be reached on Monday-Thursday, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571)272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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13 October 2008

Examiner
Art Unit 3643

/Peter M. Poon/
Supervisory Patent Examiner, Art Unit 3643